

Original Research Article

Perceptions about National Health Schemes among Patients Attending a Rural Health Training Centre of a Medical College: A Cross Sectional Study

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ABSTRACT

Background: Around 70% of the Indian population are from rural areas and around 28 percent of the population live in below poverty line; the out of pocket expenditure on health is quite a burden to the household. A report found that the coverage falls short of the desirable coverage of 25% according to the National Health Policy. Studies regarding government health schemes in the rural population are scarce. Hence, this study was conducted with objectives to assess the perception about national health schemes and to determine association between perceptions with various socio-demographic variables among patients attending Rural Health Training Centre (RHTC) of a medical college.

Methods: A cross sectional study was carried out among 107 patients attending OPD at RHTC. Data was collected with convenience sampling technique using pretested, semi-structured questionnaire. The responses were entered and statistically analysed by using SPSS v.20. Chi square test was applied to know the association between demographic variables and perception.

Results: About 60 (56.07%) participants perceived the health schemes to be beneficial to common man. While, 45 (42.05%) participants disagreed that they had adequate knowledge of scheme. Perception of agreement regarding its benefits was proportionately higher in males-46 (60.52%), in $\leq 50,000$ income- 47 (69.11%) and with card availability 55 (80.88%). Perception of agreement with respect to 'Protection from unexpected cost' by various schemes is proportionately higher in males- 32 (58.18%) and with card availability- 34 (61.81%). Perception of agreement regarding its willingness to utilize schemes was proportionately higher in ≤ 30 years of age- 39 (55.71%).

Conclusions: Majority of the participants agree that these schemes are beneficial and provide quality and affordable treatment and protects from unexpected costs. Majority of participants are willing to utilise these schemes. Therefore, it is the need of the hour to increase awareness of schemes among people.

Key-words: Health schemes, Rural Health Training Centre, Cross sectional study, Perception

INTRODUCTION

Health of the community needs higher attention while considering the development of a region or a country. One of the most significant outstanding policy concerns for the globe is the provision of health insurance or health security for the poor.¹ Around 70% of the Indian population resides in rural areas and around 28% of the population live

in below poverty line, the out of pocket expenditure on health is quite a burden to the household. Even with various Health Insurance schemes available, a report found that the coverage falls short of the desirable coverage of 25% according to the National Health Policy. Out- of-pocket medical expenses account for more than four fifths of total health-care spending in India.²

It has been found that one of the major reasons for low health insurance coverage in India is the lack of awareness of the health insurance schemes among the people.³

When people have to pay fee for health care, and the out of pocket payments are so high in relation to their income, it results in “financial catastrophe” for the individual or the household. This can mean that people have to cut down on necessities such as food and clothing, or are unable to pay or withdraw their children from schools. Many people may decide not to use health services, because they cannot afford either the direct costs, such as for consultations, medicines and laboratory tests, or the indirect costs, such as for transport and special food. Studies have shown that Poor households are likely to affect with more diseases and sink even further into poverty. Consequently, the poor either do not reach the health system or receive sub-standard care. Regardless of their financial level, the government is tasked with ensuring that all citizens have access to good health care.⁴

The universal health coverage (UHC), aimed at bridging the gap of inequality of access to healthcare, was recommended by the World Health Organization. This strategy would hopefully narrow the gaps in access to healthcare between the rich and the poor.⁵ Due to important factors including high delivery costs and poor rural population knowledge, health programmes have struggled to gain traction in rural regions. Utilization of government schemes among postnatal women was 9% to 20%. The awareness of health insurance was found to be 64.0 per cent.⁶ It is seen that due to financial constraints, the 30% of the rural population did not avail any medical treatment and in most of hospital admission in rural or urban area, the people are paid by either by taking loans or sale by their assets.⁷

These schemes are built to touch the lives of the remotest people in the country. The government is boosting its strategies and augmenting its reach mechanisms to ensure that not anyone is dispossessed of any benefits, which arise from the virtue of these schemes. These schemes have the potential to play an important role in India’s move toward universal health coverage. To do this, however, scheme awareness should be increased.⁸

Studies regarding government health schemes in the rural population are scarce. In view of this missing data and with intent to assess the awareness and perception among patients attending Rural Health Training Centre, largely rural population, this study was conducted.

As the perceptions of the beneficiaries are important drivers of various schemes or policies as it affects the utilization of those schemes, we decided to study perception regarding major health schemes.

This study was conducted with an aim to assess the perception about national health schemes and to determine the association between perceptions with various socio-demographic variables among patients attending Rural Health Training Centre (RHTC) of a medical college.

MATERIALS AND METHODS

It was a cross sectional study conducted from October to December 2020 among patients attending OPD at RHTC of Community Medicine Department in a medical college.

Assuming approximately 50% of patients may have knowledge about various government health schemes, with 95% confidence interval and 10% allowable error, sample size of 107 was calculated using the following formula: $n = Z^2 P(1 - P)/e^2$, where, Z is Value from standard normal distribution corresponding to desired confidence level (Z=1.96 for 95% CI); P is Expected true proportion= 0.5; and e is Desired precision= 10% of P.

Patients attending OPD at RHTC were interviewed on continuous basis until the required sample size was achieved. Consenting adult patients were included in the study while patients who were unable to give satisfactory interview and those having mental illness or disorder were excluded from the study.

Data was collected by the investigator using convenience sampling technique. Maximum two visits were made in a week to RHTC until desired sample was achieved. Data was collected by interviewing the participants in a local language after taking written consent. Privacy was ensured and individual results were kept confidential.

A pretested, semi-structured questionnaire was used consisting of two sections. First section consisted of Socio-demographic information like *Age, Sex, Education, Occupation, Marital status, Religion, Family size, Family type, and Income.*

The second section comprised of questions to assess the knowledge and awareness of participants about various National Health Schemes. It assessed information like awareness, source of awareness, eligibility criteria, benefits derived, beneficiaries, illnesses covered etc of various government health schemes like *Ayushman Bharat (PM-JAY), Mukhyamantri Amrutam (MA) Yojna, Janani Suraksha Yojna (JSY), Janani Shishu Suraksha Karyakram (JSSK), Kasturba Poshan Sahay Yojna (KPSY), Bal Sakha Yojna(BSY), Chiranjeevi Yojna (CY), Pradhan Mantri Matritva Vandana Yojna(PMY), Atal Sneh Yojna (ASY), Rashtriya Kishor Swasthya Karyakram (RKSK), Pradhan Mantri Suraksha Bima Yojna(PBY), Pradhan Mantri Jeevan Jyoti Bima Yojna (PJB), Pradhan Mantri Bhartiya Jan Aushadhi Kendra (PMBJK), and Integrated Child Development Services (ICDS) scheme.*

Perception among the participants about health schemes was assessed based on questions about *perception of benefits, willingness to utilize schemes, etc.*

The knowledge questions consisted of Yes/No response categories. Knowledge scores were used to categorise into good knowledge and poor knowledge. Perception questions consists of 5 point Likert scale of agreement- Strongly agree, Agree, undecided/don't know, Disagree, and Strongly disagree. Scores were used to categorise into good, bad, and neutral.

The responses of the participants were entered and statistically analysed by using SPSS v.20. Descriptive analysis for categorical and continuous variables was performed. Categorical variable results were expressed in frequency (percentages). Chi square test was applied to know the association between demographic variables and perception. P-value of less than 0.05 was considered as statistically significant and less than 0.01 was considered to be highly significant.

To ensure Quality Control, a pilot study was done for 10% of the sample size. Checking and reviewing of questionnaire was done after data collection by the investigator. Ethical clearance was obtained from Institutional Ethical Committee (IEC) before start of study.

RESULTS

Table 1 shows that 60 (56.07%) participants perceived the health schemes to be beneficial to common man and 49 (45.79%) participants agreed that these schemes help provide quality and affordable treatment. Agreement for cashless service was 50 (46.72%), for protection from unexpected cost was 54 (50.46%). While, 43 (40.18%) agreed that it's important to have health insurance, 34 (31.77%) disagreed that Government health insurance are useless. Most participants 44 (41.12%) didn't know whether benefits are easily accessible. About 46 (42.99%) participants agreed that schemes are useful in emergency, 45 (42.05%) participants disagreed that they had adequate knowledge of scheme. Most 55 (51.40%) participants agreed that they will get benefits of schemes in future.

It is evident from table 2 that Perception of agreement regarding its benefits was proportionately higher in males- 46 (60.52%), in $\leq 50,000$ income- 47 (69.11%) and with card availability- 55 (80.88%). No significant association was found with age, education, occupation, number of family members and type of family.

It is evident from table 3 that Perception of agreement with respect to 'Protection from unexpected cost' by various schemes is proportionately higher in males- 32 (58.18%) and with card availability- 34 (61.81%). No significant association was found with age, education, occupation, number of family members, type of family and income.

It is evident from the table 4 that Perception of agreement regarding its willingness to utilize schemes was proportionately higher in ≤ 30 years of age- 39 (55.71%). No significant association was found with sex, education, occupation, number of family members, type of family, income, and card availability.

Table 1: Distribution of participants according to perceptions (N=107)

Question related to health schemes	Agree n (%)	Strongly Agree n (%)	Don't know n (%)	Disagree n (%)	Strongly Disagree n (%)	Total N (%)
Beneficial to Common man	60 (56.07)	8 (7.47)	16 (14.95)	19 (17.75)	04 (3.78)	107 (100)
Quality & affordable treatment	49 (45.79)	8 (7.47)	23 (21.49)	24 (22.42)	03 (2.80)	107 (100)
Cashless service	50 (46.72)	3 (2.80)	29 (27.10)	25 (23.36)	00 (00)	107 (100)
Protect from unexpected cost	54 (50.46)	1 (0.93)	32 (29.90)	19 (17.75)	01 (0.93)	107 (100)
It's important to have Health insurance	43 (40.18)	9 (8.41)	40 (37.38)	15 (14.01)	00 (00)	107 (100)
Govt. Health insurance is useless	25 (23.36)	1 (0.93)	42 (39.25)	34 (31.77)	05 (4.67)	107 (100)
Benefits are easily accessible	33 (30.84)	1 (0.93)	44 (41.12)	24 (22.42)	05 (4.67)	107 (100)
Useful in emergency	46 (42.99)	1 (0.93)	32 (29.90)	22 (20.56)	06 (5.60)	107 (100)
Have adequate knowledge of scheme	20 (18.69)	4 (3.78)	25 (23.36)	45 (42.05)	13 (12.14)	107 (100)
Will get benefits of schemes in future	55 (51.40)	16 (14.95)	16 (14.95)	18 (16.82)	02 (1.86)	107 (100)

Table 2: Association of perceptions of schemes with respect to their ‘benefits to common man’

Variables	Agree/ Strongly agree n (%)	Disagree/ Strongly disagree n (%)	Don’t know n (%)	Test of significance
Age group (in years)				$\chi^2 = 1.365$; df = 2; p = 0.505
≤30	39 (57.35)	10 (43.47)	09 (56.25)	
>30	29 (42.64)	13 (56.52)	7 (43.75)	
Sex				$\chi^2 = 6.421$; df = 2; p = 0.040
Male	44 (64.70)	20 (86.95)	08 (50)	
Female	24 (35.29)	03 (13.04)	8 (50)	
Education				$\chi^2 = 4.553$; df = 2; p = 0.102
Illiterate/Primary/ Secondary	25 (36.76)	07 (30.43)	10 (62.5)	
Higher Secondary or higher	43 (63.23)	16 (69.56)	6 (37.5)	
Occupation				$\chi^2 = 2.268$; df = 4; p = 0.686
Housewife/Retired	18 (26.47)	08 (34.78)	06 (37.5)	
Labourer/unemployed	24 (35.29)	05 (21.73)	04 (25)	
Job/Business	26 (38.23)	06 (26.08)	06 (37.5)	
Family Members				$\chi^2 = 3.46$; df = 2; p = 0.177
≤4	22 (32.35)	10 (43.47)	09 (56.25)	
>4	46 (67.64)	13 (56.52)	7 (73.75)	
Type of Family				$\chi^2 = 5.445$; df = 2; p = 0.065
Nuclear	35 (51.47)	12 (52.17)	14 (87.50)	
Joint/Three generation	23 (33.82)	11 (47.82)	02 (12.50)	
Income				$\chi^2 = 8.521$; df = 2; p = 0.014
≤50000	47 (69.11)	08 (34.78)	10 (62.5)	
>50000	21 (30.88)	15 (65.21)	06 (37.5)	
Card availability				$\chi^2 = 11.091$; df = 2; p = 0.003
Yes	55 (80.88)	42 (182.60)	65 (406.25)	
No	13 (19.11)	19 (82.60)	49 (306.25)	
Total	68 (100)	23 (100)	16 (100)	

Table 3: Association of perceptions of schemes with respect to ‘protection from unexpected cost’

Variables	Agree/ Strongly agree n (%)	Disagree/ Strongly disagree n (%)	Don't know n (%)	Test of significance
Age group (in years)				$\chi^2 = 4.379$; df = 2; p = 0.111
≤30	29 (52.72)	08 (40.00)	22 (68.75)	
>30	26 (47.27)	12 (60.00)	10 (31.25)	
Sex				$\chi^2 = 9.09$; df = 2; p = 0.010
Male	32 (58.18)	19 (95.00)	21 (65.62)	
Female	23 (41.81)	1 (5.00)	11 (34.37)	
Education				$\chi^2 = 2.127$; df = 2; p = 0.345
Illiterate/Primary/ Secondary	23 (41.81)	05 (25.00)	14 (43.75)	
Higher Secondary or higher	32 (58.18)	15 (75.00)	18 (56.25)	
Occupation				$\chi^2 = 0.273$; df = 4; p = 0.991
Housewife/Retired	16 (29.09)	05 (25.00)	09 (18.12)	
Labourer/unemployed	15 (27.27)	06 (30.00)	10 (31.25)	
Job/Business	24 (43.63)	09 (45.00)	13 (40.62)	
Family Members				$\chi^2 = 1.416$; df = 2; p = 0.492
≤4	19 (34.54)	07 (35.00)	15 (46.87)	
>4	36 (65.45)	13 (65.00)	17 (53.12)	
Type of Family				$\chi^2 = 0.204$; df = 2; p = 0.903
Nuclear	33 (60.00)	11 (55.00)	18 (56.25)	
Joint/Three generation	22 (40.00)	9 (45.00)	14 (43.75)	
Income				$\chi^2 = 5.268$; df = 2; p = 0.071
≤50000	27 (49.09)	09 (45.00)	23 (71.87)	
>50000	28 (50.90)	11 (55.00)	9 (28.12)	
Card availability				$\chi^2 = 11.464$; df = 2; p = 0.003
Yes	34 (61.81)	08 (40.00)	08 (25.00)	
No	21 (38.18)	12 (60.00)	24 (75.00)	
Total	55 (100)	20 (100)	32 (100)	

Table 4: Association of perceptions of schemes with respect to ‘willingness to utilize’ various schemes on applying chi square test

Variables	Agree/ Strongly agree n (%)	Disagree/ Strongly disagree n (%)	Don’t know n (%)	Test of significance
Age group (in years)				$\chi^2 = 10.209$; df = 2; p = 0.006
≤30	39 (55.71)	06 (30.00)	14 (82.35)	
>30	31 (44.28)	14 (70.00)	3 (17.64)	
Sex				$\chi^2 = 1.824$; df = 2; p = 0.401
Male	45 (64.28)	16 (80.00)	12 (70.58)	
Female	25 (35.71)	04 (20.00)	05 (29.41)	
Education				$\chi^2 = 4.694$; df = 2; p = 0.095
Illiterate/Primary/ Secondary	32 (45.71)	05 (25.00)	04 (23.52)	
Higher Secondary or higher	38 (54.28)	15 (75.00)	13 (76.47)	
Occupation				$\chi^2 = 2.834$; df = 4; p = 0.585
Housewife/Retired	18 (25.71)	08 (40.00)	06 (35.29)	
Labourer/unemployed	24 (34.28)	04 (20.00)	04 (23.52)	
Job/Business	28 (40.00)	08 (40.00)	05 (29.41)	
Family Members				$\chi^2 = 1.137$; df = 2; p = 0.566
≤4	27 (38.57)	06 (30.00)	08 (47.05)	
>4	43 (61.42)	14 (70.00)	9 (52.94)	
Type of Family				$\chi^2 = 1.847$; df = 2; p = 0.397
Nuclear	42 (60.00)	13 (65.00)	07 (41.17)	
Joint/Three generation	28 (40.00)	07 (35.00)	09 (52.94)	
Income				$\chi^2 = 5.048$; df = 2; p = 0.080
≤50000	41 (58.57)	08 (40)	13 (76.47)	
>50000	29 (41.42)	12 (60.00)	04 (23.52)	
Card availability				$\chi^2 = 4.516$; df = 2; p = 0.104
Yes	39 (55.71)	08 (40.00)	05 (29.41)	
No	31 (44.28)	12 (60.00)	12 (70.58)	
Total	70 (100)	20 (100)	17 (100)	

DISCUSSION

Pavithra C et al¹ (2016) found that 25.83% of the respondents benefitted by getting surgeries done for different ailments related to stomach, gall bladder, bone and kidney; nearly 6 per cent of respondents have availed the benefits of most advanced and expensive open heart surgery under the health scheme. The possible reasons might be that poor and disadvantaged sections are daily wage workers, agricultural labourers, construction workers and domestic workers, farmers, tribal population, etc. Thirty one per cent of the respondents were found in the low overall awareness category, which is in line with our findings.

A study by Selvam V et al⁹ (2019) conducted in Tamil Nadu showed that 36% of the respondents agree that they were aware of integrated child development scheme with mean score value 3.67 and 35% of the respondents agree that they were aware of reproductive, maternal, new-born, child and adolescent health scheme and initiates by the government with mean score value 3.38. In our study 48 (44.85%) had heard about the ICDS scheme.

Madhukumar S et al² (2012) conducted a study in Bangalore and found only one third of the houses were aware of health insurance but only 22% had health insurance coverage. The subscription depended on education, socio-economic status, type of family. Out of the 75 families who had health insurance 23 (30.7%) of the families had availed benefits. Study conducted by Reshmi et al⁶ showed 34% were aware through TV ads. It was also found that the subscription was less in joint families as the number of family members increased. These findings are in contrast to our study. The knowledge regarding those schemes was also inadequate. These findings are in line with our study.

Chauhan T¹⁰ (2017) showed around 45.4% were aware about Mediclaim scheme, 16.36% about Janani Suraksha Yojana/ Arogya BimaYojana/ Janshree community health insurance and Aam Aadmi Bima Yojana with 05 in number. Only 7.25% heard about Universal health Insurance scheme (Jana Raksha Scheme) and Rashtriya Sawsthya Bima scheme.¹⁰

Yadlapalli SK et al¹¹ (2018) conducted a study in Delhi and found that only 19% knew about health

insurance; 18% had health insurance (Employees State Insurance Scheme – ESIS – 8%; Central Government Health Scheme – CGHS – 1.4%; Rashtriya Swasthya Bima Yojana (RSBY) – 9.4% of the eligible households). 95% of CGHS, 71% ESIS, and 9.5% RSBY users used the programmes for episodic and chronic diseases when they needed health care. 54% of RSBY, 86% of ESIS, and 100% of CGHS used the corresponding services for hospitalisation requirements. 46% of CGHS, 24% of ESIS, and 4% of RSBY beneficiaries who were asked if having insurance helped them seek treatment from a facility of their choice responded in the affirmative. In the present study, 49 respondents (45.79%) agreed that health plans offer effective and inexpensive medical care.

Just over 1% of India's GDP is devoted to public healthcare spending, one of the lowest in the world. The Indian health system also needs improvement in terms of its staff, infrastructure, and the standard and accessibility of services. If India wants to achieve its stated goals of providing universal health coverage (UHC) for its people, extensive reforms across public and private sources of care are required. The public sector will be responsible for overseeing the implementation, delivery, and monitoring of the programmes, and their success will depend on its reform and proper funding. Even though there are many obstacles in the way of the program's success, AB-PMJAY offers the country the chance to address ingrained problems with governance, quality assurance, and stewardship and quicken India's progress towards its stated objective of UHC provision. To make sure the programme is accomplishing its goals in a sustainable way and avoiding unfavourable unexpected outcomes, implementation and continued operation must be closely evaluated.¹²

In a study conducted by Bhandari DJ¹³ (2008)¹³ in Gujarat found that Utilization of government schemes among postnatal women was 9% to 20%. Out of 97 women who delivered in private hospital, 64 women were eligible for the benefits of CY, being below poverty line. Out of these 64 women, only 6 (9.4%) women got the benefit of this Yojna. Similarly, out of 123 women who were eligible for the benefits of JSY, only 25 (20.3%) women got the benefit of this Yojna. In present study utilisation of various schemes was found to be poor 32 (29.90%).

CONCLUSIONS

It is evident from the present study that with respect to perception, majority of the participants agree that these schemes are beneficial and provide quality and affordable treatment and protects from unexpected costs. Majority of participants are willing to utilise these schemes. Therefore, it is the need of the hour to increase awareness of schemes among people with respect to their benefits, eligibility criteria, how to avail benefit etc. The findings from the present study will be an eye opener to know where the patients stand with regard to their knowledge and perception about health schemes. It can also help the policy makers to become aware of the present status among participants and take the necessary steps in this regard. Also similar studies conducted in other parts of the country will help to add to the knowledge further.

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